



# SEQUENCE LISTING

A2

<110> Yu, Long  
Zhang, Honglai  
Fu, Qiang  
Zhao, Yong  
Tu, Qiang

<120> NEW HUMAN HEPATOMA-DERIVED GROWTH FACTOR ENCODING SEQUENCE AND  
POLYPEPTIDE ENCODED BY SUCH DNA SEQUENCE AND PRODUCING METHOD THEREOF

<130> 9548.50USWO

<140> US 09/787,328  
<141> 2001-03-16

<150> PCT/CN99/00139  
<151> 1999-09-06

<150> CN 98119758.2  
<151> 1998-09-22

<160> 10

<170> PatentIn version 3.1

<210> 1  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic primer for polymerase chain reaction (PCR)

<400> 1  
accgctcgtc cgcccggctt gag 23

<210> 2  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic primer for polymerase chain reaction (PCR)

<400> 2  
gatcctagac atgtataagt ctgcgc 26

<210> 3  
<211> 1024  
<212> DNA  
<213> Homo sapiens

<400> 3  
accgctcgtc cgcccggctt gaggcccgcg gggagcgcg gcaattcgtc ggcccgcggg 60  
ggggcggcct cccggcatct tcgcggcgac caaggactac caggaagggg agcggctggg 120

atggcgcgctc cgcgggccccg cgagtacaaa gcggggcgacc tgggtcttcgc caagatgaag 180  
ggctacccgc actggccggc ccggattgat gaactcccag agggcgctgt gaagcctcca 240  
gcaaacaagt atcctatctt cttttttggc acccatgaaa ctgcatttct aggtcccaaa 300  
gacctttttc catataagga gtacaaagac aagtttggaa agtcaaacaa acggaaagga 360  
tttaacgaag gattgtggga aatagaaaat aaccaggag taaagtttac tggctaccag 420  
gcaattcagc aacagagctc ttcagaaact gagggagaag gtggaaatac tgcagatgca 480  
agcagtgagg aagaaggtga tagagtagaa gaagatggaa aaggcaaaag aaagaatgaa 540  
aaagcaggct caaaacggaa aaagtcatat acttcaaaga aatcctctaa acagtcccgg 600  
aaatctccag gagatgaaga tgacaaagac tgcaaagaag aggaaaacaa aagcagctct 660  
gaggggtggag atgcgggcaa cgacacaaga aacacaactt cagacttgca gaaaaccagt 720  
gaagggacct aactaccata atgaatgctg catattaaga gaaaccacaa gaaggttata 780  
tgtttggttg tctaatatc tggatttga tatgaaccaa cacatagtcc ttgttgctcat 840  
tgacagaacc ccagtttgta tgtacattat tcatattcct ctctgttggtg tttcgggggg 900  
aaaagacatt ttagcctttt ttaaaagtta ctgatttaat ttcattgttat ttggttgcat 960  
gaagttgccc ttaaccacta aggattatca agatttttgc gcagacttat acatgtctag 1020  
gatc 1024

<210> 4  
<211> 203  
<212> PRT  
<213> Homo sapiens

<400> 4

Met Ala Arg Pro Arg Pro Arg Glu Tyr Lys Ala Gly Asp Leu Val Phe  
1 5 10 15

Ala Lys Met Lys Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Glu Leu  
20 25 30

Pro Glu Gly Ala Val Lys Pro Pro Ala Asn Lys Tyr Pro Ile Phe Phe  
35 40 45

Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro  
50 55 60

Tyr Lys Glu Tyr Lys Asp Lys Phe Gly Lys Ser Asn Lys Arg Lys Gly  
65 70 75 80

Phe Asn Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Gly Val Lys Phe  
85 90 95

Thr Gly Tyr Gln Ala Ile Gln Gln Gln Ser Ser Ser Glu Thr Glu Gly  
100 105 110

Glu Gly Gly Asn Thr Ala Asp Ala Ser Ser Glu Glu Glu Gly Asp Arg  
115 120 125

Val Glu Glu Asp Gly Lys Gly Lys Arg Lys Asn Glu Lys Ala Gly Ser  
130 135 140

Lys Arg Lys Lys Ser Tyr Thr Ser Lys Lys Ser Ser Lys Gln Ser Arg  
145 150 155 160

Lys Ser Pro Gly Asp Glu Asp Asp Lys Asp Cys Lys Glu Glu Glu Asn  
165 170 175

Lys Ser Ser Ser Glu Gly Gly Asp Ala Gly Asn Asp Thr Arg Asn Thr  
180 185 190

Thr Ser Asp Leu Gln Lys Thr Ser Glu Gly Thr  
195 200

<210> 5  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic primer for polymerase chain reaction (PCR)

<400> 5  
ccacggatcc atggcgcgctc cgcggcccc

29

<210> 6  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic primer for polymerase chain reaction (PCR)

<400> 6  
atccgctcgac ttaggtccct tcaactggtt

29

<210> 7  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
 <223> Synthetic primer for polymerase chain reaction (PCR)  
 <400> 7  
 ccctaagctt atggcgcgtc cgcgcccc 29

<210> 8  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic primer for polymerase chain reaction (PCR)  
 <400> 8  
 ttctgatcc ttaggtccct tcaactggtt 29

<210> 9  
 <211> 1563  
 <212> DNA  
 <213> Mus musculus

<400> 9  
 cgcaaacttg ggctcgcgct tcccggctcg gcgcggagcc cggggcgccc gcggccccgc 60  
 catgtcgcca tccaaccggc agaaagagta caagtgcgga gacctggtgt ttgcgaagat 120  
 gaaaggatac ccacactggc cggcccggat tgatgagatg cctgaggctg cagtgaagtc 180  
 aacagccaac aaataccaag tctttttttt tgggacctat gagacggcat tctggggccc 240  
 caaagacctc ttcccttatg aggaatccaa ggagaagtgt ggcaagccca acaagaggaa 300  
 agggttcagc gaggggctgt gggagatcga gaacaacctt acagtcaagg cctctggcta 360  
 ccagtcctcc cagaaaaaga gttgtgcggc agagcccagag gtggagcccg aagcccatga 420  
 ggggtgacggg gataagaagg gcagtgcaga gggcagcagc gacgaagaag ggaaactggt 480  
 gatcgatgaa ccagccaagg agaagaacga aaagggcacg ctgaagagga gagcagggga 540  
 tgtgttgagg gactccccta aacgtcccaa ggagtcagga gaccatgagg aggaggacaa 600  
 ggagatagct gccttgaggg gtgagaggca cctgcctgta gaggtggaga agaacagcac 660  
 cccctctgag ccagactctg gccagggacc tctgcagag gaagaagagg gagaggaaga 720  
 ggctgccaag gaagaggctg aagccccagg cgtcagagat catgagagcc tgtagccacc 780  
 aatgtttcaa gaggagcccc tgccccgttc ctgctgctgt ctgggtgcta ctggggaaac 840  
 tggccatggc ctgcaaaactg ggaacccttt cccaccctat ttaccctact ccctcactca 900  
 ctctctcttc taagcccact cctggagagt gtcttgggcc tcacctccag ctcccttcct 960  
 atatacacc tgtgccccag gatgagatga ggcctttgta tctctttaca cttgtttccc 1020

agggtttctg ctggggtcta ggctgctgtt tccacctctt gacacctctg ccctgctgca 1080  
ggcattctag acctttgggg tggatagtgg gcaggagtgg aggtgaaaga atataaagga 1140  
gtgtgggttc atggatggca tcgtctacct gagctcctgt ctccagcccc cacacttatt 1200  
ttcccatctg cctacattca agaaacagga cactgtggga gagaggctac catccatcca 1260  
taaatecttg ttgatttttg ggaacactta tccccctgac cccagggttc aaggaattgt 1320  
agtttaacat ctagactttg gagtttccaa gtttgggcct aggacctgga gggagctaag 1380  
agctgaagaa tcaactgatt tgcattgagg aaatgtctct ttagatctca gggcagaaat 1440  
gataacctgg ggagacctgc tgccttcac tcttcccaa tgcttgaggc cagcctgtag 1500  
tcagatattt caccagaca taaaggaaaa gaccattttt tttaggaaat gtttttaata 1560  
aaa 1563

<210> 10  
<211> 237  
<212> PRT  
<213> Mus musculus

<400> 10

Met Ser Arg Ser Asn Arg Gln Lys Glu Tyr Lys Cys Gly Asp Leu Val  
1 5 10 15

Phe Ala Lys Met Lys Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Glu  
20 25 30

Met Pro Glu Ala Ala Val Lys Ser Thr Ala Asn Lys Tyr Gln Val Phe  
35 40 45

Phe Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe  
50 55 60

Pro Tyr Glu Glu Ser Lys Glu Lys Phe Gly Lys Pro Asn Lys Arg Lys  
65 70 75 80

Gly Phe Ser Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Thr Val Lys  
85 90 95

Ala Ser Gly Tyr Gln Ser Ser Gln Lys Lys Ser Cys Ala Ala Glu Pro  
100 105 110

Glu Val Glu Pro Glu Ala His Glu Gly Asp Gly Asp Lys Lys Gly Ser  
115 120 125

Ala Glu Gly Ser Ser Asp Glu Glu Gly Lys Leu Val Ile Asp Glu Pro  
130 135- 140

Ala Lys Glu Lys Asn Glu Lys Gly Thr Leu Lys Arg Arg Ala Gly Asp  
145 150 155 160

Val Leu Glu Asp Ser Pro Lys Arg Pro Lys Glu Ser Gly Asp His Glu  
165 170 175

Glu Glu Asp Lys Glu Ile Ala Ala Leu Glu Gly Glu Arg His Leu Pro  
180 185 190

Val Glu Val Glu Lys Asn Ser Thr Pro Ser Glu Pro Asp Ser Gly Gln  
195 200 205

Gly Pro Pro Ala Glu Glu Glu Glu Gly Glu Glu Glu Ala Ala Lys Glu  
210 215 220

Glu Ala Glu Ala Pro Gly Val Arg Asp His Glu Ser Leu  
225 230 235